

Alpine County

Upper Mokelumne / Upper Stanislaus /
South Fork American / Upper Carson /
West Walker Watersheds



Amount Funded: \$138,473

Additional Funding Obtained to Date: \$172,583

Background

These watersheds are located in Alpine County, the least populated county in the state, and provide water to regions throughout California. Today, 96% of the land is publicly owned, heavily forested, and highly utilized by outdoor recreationists. Resource management is challenged by excessive fuel loads and erosion that have resulted from over 150 years of extensive mining, grazing, timber harvesting, and road building. Mining operations were common at one time and more than 300 abandoned mines are located throughout Alpine County. Timber operations, rural development, and grazing practices have contributed to sedimentation and erosion. With an increase in the population and consequential recreational impacts, animal habitats and water quality continue to be threatened. It is imperative that this pristine environment is restored and protected for future generations.

Benefits to the Watershed

- ◆ Developed the Alpine Watershed Group's Erosion Control BMP Program. The program assists local contractors in identifying, properly installing, and maintaining BMPs in Alpine County. The program was developed in partnership with Alpine County Public Works and Planning Departments and local contractors. The program will include a manual and workshops specific to Alpine County.
- ◆ Coordinated the Annual Alpine Fishing Meeting to address in-stream habitat and fisheries issues and identify potential restoration efforts.
- ◆ Secured \$200,000 for a collaborative restoration effort for the Lower Hope Valley. The project is being conducted in partnership with the California Department of Fish and Game and the Alpine Watershed Group.



Trail maintenance work as part of Alpine Creek Days.

- ◆ Developed a monitoring plan for the restoration efforts on Markleeville Creek at a United States Forest Service Guard Station.
- ◆ Organized a public meeting to garner community support for the Markleeville Creek project. The coordinator has also solicited support from stakeholder groups. The eighteen groups have dedicated a total of 150 hours to the project.
- ◆ Coordinated an erosion control effort at the east end of Indian Creek Reservoir with partners (BLM, Local Fish and Game Commission, and Alpine Watershed Group). The coordinator developed a project proposal and identified potential funding sources to implement BMPs to address phosphorous TMDL on the reservoir.
- ◆ Attained 501(c)(3) status for the Alpine Watershed Group. The nonprofit status will give them access to additional funding opportunities for their volunteer citizen water quality monitoring, Alpine Creek Days, restoration activities, and erosion control BMPs.
- ◆ Helped the Markleeville Water Company complete an application for Tahoe Sierra IRWM funding. The proposal would provide \$1.2 million of Proposition 50 funding for IRWM projects.
- ◆ Helped identify potential nonpoint and point sources of pollution identified in headwaters of the Mokelumne River as part of the Upper Mokelumne River Watershed Assessment and Planning Project.
- ◆ Obtained equipment and supplies to collect macroinvertebrate samples within streams throughout the county. The information gathered will provide a better understanding of the impacts of various land uses and water management techniques.
- ◆ Trained volunteers as citizen water quality monitors during a Kirkwood Creek Day event. The event included developing a water quality snapshot and conducting a creek clean up.
- ◆ Organized a two-day workshop to train volunteers about bioassessment.

Benefits to CALFED Program

Watershed Management – The coordinator supported the Watershed Program’s goals of fostering collaboration between stakeholders and agencies and the goal to build capacity for local stakeholders to address watershed issues. This year the coordinator continued to serve on the Upper Mokelumne River Watershed Assessment and Planning Project Advisory Committee. The coordinator represented the interests of Alpine County stakeholders and helped identify potential sources of point and nonpoint pollution. Additionally, the coordinator worked with Alpine County to develop a groundwater management plan and assisted in the dissemination of the information gathered through the study.

The coordinator also trained citizen water quality monitors in bioassessment and basic water quality monitoring. The first full year of citizen volunteer monitoring was completed this year. The coordinator analyzed and distributed the data. Finally, the coordinator worked to reduce duplication of efforts and ensure issues are addressed on a regional basis by meeting and working with many different groups including the Alpine Resource Advisory Council, the Central Sierra RC&D, the Upper Mokelumne River Watershed Council, the Carson River Coalition, the Upper Mokelumne River Watershed Assessment Project Advisory Committee, the Sierra Tahoe, IRWMP Group, and the American River Regional Coordination Team.

Water Use Efficiency – The coordinator completed several activities that supported the goals of the Water Use Efficiency program. This year the coordinator began coordinating an effort to update Markleeville Water Company conveyance system in order to decrease the loss of water through pipeline failures and the installation of meters.

Ecosystem Restoration – In support of the Ecosystem Restoration Program goals, the coordinator wrote and submitted three project proposals to seek support from state and federal agencies in conducting large-scale restoration projects that will increase instream and riparian habitat throughout Alpine County. The coordinator also acted as the project manager of the Markleeville Stream Restoration project. The project involves coordinating 18 agencies and organizations to restore ¼ mile of floodplain and stream channel. The restoration will improve habitat and water quality.

Drinking Water Quality – The coordinator worked to support the goals of the Drinking Water Quality program. Specifically, the coordinator provided support for the development of a groundwater management plan for Alpine County and coordinated a streambank restoration project in partnership with the USFS to improve water quality in Hot Springs creek, the drinking water source for the Markleeville Water Company.

Performance Measures

Goal 1: Preserve and enhance the natural system functions of Alpine County's watersheds for future generations.

Objective #1: Assess the Watershed Systems within the Upper Carson, Upper Mokelumne, Upper American, and Upper Stanislaus Watersheds to determine the health of their natural system functions

Performance Measurement: A completed set of watershed assessment reports for the Upper Carson, Upper Mokelumne, Upper American and Upper Stanislaus watersheds in Alpine County that identify reaches and specific areas of the watershed that require enhancement or preservation actions.

Progress:

- Facilitated the consolidation of Alpine Watershed Group GIS information with Alpine County GIS information to produce an expanded GIS network within Alpine County.
- Trained watershed citizen monitors to use GPS for photo-monitoring and data collection.
- Worked with partners to determine what types of macroinvertebrates exist in Alpine County watersheds.
- Held a 2-day training that trained 15 citizen volunteers to conduct bioassessment samples.

Objective #2: Accomplish Stream Restoration in the Watersheds.

Performance Measurement: Restore 2.5 miles of stream reaches with bio-engineering techniques in Alpine County; begin a multi-million dollar reconstruction restoration on 1 mile of stream reach in the County which reduces sedimentation by 50% below restored sites.

Progress:

- Coordinated a ¼ mile revegetation project in Hope Valley.
- Completed monitoring for the Hope Valley restoration site.
- Submitted and received a \$128,987 USRP grant to plan a ½ mile restoration project.
- Coordinated a ¼ mile restoration project on Markleeville Creek and a 1/8-mile restoration project on East Fork Carson River.

Objective #3: Monitor progress of watershed restoration and protection.

Performance Measurement: Pre and post monitoring data exists for each restoration project, on-going monitoring data occurs for 5 sites on each Alpine County watershed; and ongoing data collection is reported and analyzed to identify reaches for future work or protection.

Progress:

- Recruited and trained volunteers for monitoring in Markleeville. The volunteers monitored 9 sites in the Carson Watershed.
- The volunteer monitors conducted water quality monitoring in Kirkwood.
- Trained ten individuals in Kirkwood for water quality monitoring.
- Completed an annual monitoring report.

Goal 2: Inspire participation, collaboration, and education to implement projects that benefit and steward the county's watersheds.

Objective 2.1: Ensure continued diverse, stakeholder participation to represent the variety of stakeholders in all five headwater watersheds in Alpine County.

Performance Measurement: Ensure 75% of the following types of stakeholders are represented at the majority of group monthly meetings: ranchers, conservation groups, landowners, federal agencies, tribes, state agencies, local agencies, water districts, recreation interests, business owners, wildlife advocates, teachers, and unaffiliated residents and that there is participation from stakeholders from the Carson, American, Mokelumne, and Stanislaus watersheds.

Progress:

- Published and distributed a monthly newsletter to educate and keep stakeholders information about watershed issues.
- Recruited new members to serve on the watershed group.

Objective 2.2: Develop Community Watershed Awareness and Commitment to watershed protection.

Performance Measurement: Involve 10% of the community of Alpine County in watershed forums, creek days, and other watershed activities.

Progress:

- Worked with Woodford High school students to create and distribute a GIS watershed map that shows priority restoration sites.
- Held watershed workdays in Markeleeville, Bear Valley Creek, Hope Valley, Markleville Creek, and Kirkwood Day Creek. A total of 160 volunteers attended the work days.
- Held a watershed workday with the Washoe Tribe. 20 volunteers participated.
- Constructed a trifold display about the watershed and the activities of the watershed group. The display was used at a variety of public events.

Watershed Goal 3: Build the Alpine Watershed Group Capacity to accomplish goals one and two.

Objective 3.1: Coordinate with other Watershed Groups in shared major watersheds to share information, resources, and to avoid duplication of effort.

Performance Measurement: Avoid duplicating any projects by another watershed group in the shared watershed and have at least one collaborative project with each watershed group that exists in a shared watershed.

Progress:

Met with watershed coordinators in all shared major watersheds to share information and determine potential areas for collaboration.

Objective 3.2: Facilitate and coordinate a meetings and committees to achieve tasks in the Strategic Plan, attract and retain members.

Performance Measurement: 90% retention rate of stakeholder participation in monthly meetings annually and 98% completion of Workplan tasks on deadline

Progress:

Conducted monthly stakeholder meetings and presented monthly progress reports to group.

Arroyo Seco Foundation

Los Angeles Watershed



Amount Funded: \$214,360

Additional Funding Obtained to Date: \$391,000* (funding received 6/16/06)

Background

The Arroyo Seco watershed is located within the larger Los Angeles Watershed. It connects the San Gabriel Mountains with downtown Los Angeles. Over the years, water consumption has increased dramatically, creating tremendous stress on the watershed. In addition, creeks and rivers throughout the watershed are contaminated because of algae, fecal coliform, trash, and commercial activities. This has resulted in the upper portion of the watershed being designated a Superfund site and caused the closure of nine of Pasadena's wells. As the population increases, so will the need to address these critical issues.

Benefits to the Watershed

- ◆ Held the initial organization meeting for the Arroyo Seco Stream Team, a group of volunteers who will conduct water quality monitoring, education, restoration, and clean-up activities in the watershed. Fifteen participants signed up for work projects.
- ◆ Prepared and printed the first bill insert for the Valley Water Company (VWC) water conservation partnership, which was delivered to 3,600 customers. The insert focused on native plant and California friendly landscaping tips for residents. Also prepared the insert and news release for the next billing cycle, which will focus on VWC's rebate program regarding ET based irrigation controllers.
- ◆ Promoted and presented local water conservation and water quality information at the Water Wise Garden Anniversary Celebration at the Lummis Home in Northeast Los Angeles, which was attended by over 200 residents.
- ◆ Presented information on Arroyo planning efforts water quality and water conservation to the Hermon Neighborhood Association, the Pasadena Garden Club, and the national Conservation Committee of the Garden Clubs of America. More than 125 people attended the events.



The Watershed Coordinator participated in an anniversary celebration of a public water-wise garden along the Arroyo Seco.

- ◆ Discussed water quality with Friends of the Hermon Dog Park, an advocacy group for a dog park located on the banks of the Arroyo Seco. Outlined Best Management Practices (BMPs) for dog owners and gave suggestions for park design to reduce potential negative impacts on water quality in the Arroyo Seco stream.

Benefits to CALFED Program

Watershed Management – Continued to work with partners on activities throughout the watershed. Spearheaded the Council of Arroyo Seco Agencies (CASA) workshop to coordinate water quality issues in the Arroyo Seco. Representatives from the City of La Canada Flintridge, Angeles National Forest, LA County, City of Pasadena, City of South Pasadena, City of LA, and the RWQCB discussed issues relating to stormwater. Continued outreach efforts to

educate local residents about the environment. Conducted four events that focused on water conservation methods. Also included information in VWC's inserts that directed people to the "Be Water Wise" webpage for more specific information.



Watershed Coordinator presents the Verde Award to Congressman Adam Schiff at the Council of Arroyo Seco Organizations' meeting.

Water Use Efficiency – Promoted native plant sales for Theodore Payne Foundation and California native Plant Society – San Gabriel Mountains Chapter. Informed residents about native plant garden design workshops hosted by Pasadena Water and Power, Theodore Payne Foundation and California Plant Society. Used website and Arroyo news service to inform community about the water conserving landscapes. Promoted Pasadena Water and Power's community meeting to discuss their Urban Water Management Plan. Provided comments on plan to increase the use of recycled water and water conservation programs.

Ecosystem Restoration – Held meetings and promoted the Los Angeles County Department of Public Works and Army Corps of Engineers restoration feasibility study of the Arroyo Seco.

Performance Measure Progress

Goal: Better Manage, Optimize and Conserve Water Resources and Improve Water Quality.

Objective # 1: Conservation and Improved Water Management

Performance Measure: Amount of increased groundwater storage, irrigation savings

Progress:

- Promoted watershed awareness to 150 attendees Lower Arroyo Trails Day Celebration

- WC presented watershed and source water information to the Sierra Club's Political Action Committee.
- Providing information on native plants of the Arroyo to the Pasadena Urban Forestry Advisory group to shape public policy and program development.
- Moved forward in setting up institutional agreements amongst grant partners in the Brookside BMP grant.
- Encouraged and strengthened efforts in conservation and water management by acknowledging individuals' and organizations' stewardship with Arroyo Verde Awards.

Objective # 2: Improve Water Quality

Performance Measure: Reduction in contaminants in Arroyo Seco Stream; wells put back into service.

Progress:

- Arroyo Seco Stream Team participated in three water quality monitoring events. ASST collected data on relevant water quality parameters at eleven sites.
- The Arroyo Seco Foundation moved forward in implementing the 1.9 million dollar grant to install water quality BMPs in a subwatershed and parking lot in Pasadena. This project will have a positive effect on water quality in the whole stream.
- WC assisted community in creating a raingarden in a pocket park, which will deter storm run-off from the Arroyo Seco.

Objective # 3: Stakeholder Outreach and Education

Performance Measure: Number of organizations and volunteers involved in watershed improvement activities; number of volunteer activities with quantitative improvements; Amount of funding for priority projects.

Progress:

- Six unique volunteer opportunities were promoted through the Arroyo Seco Foundation's website and news service.
- Twenty local organizations participated in the quarterly CASO meeting to discuss relevant projects and programs, including a presentation of the proposed Arroyo Center for Art and the Environment.
- The joint-decision of the Los Angeles Commission of Public Works and the Los Angeles City Councilman to construct an alternative route for the tax-assessed sewer line as a means to protect the community-created garden BMP, resulted in incurring an additional \$15,000 cost. That amount was absorbed by the two entities, as a benefit to the community.

Battle Creek Watershed Conservancy Upper Cow-Battle Watershed



Amount Funded: \$87,918

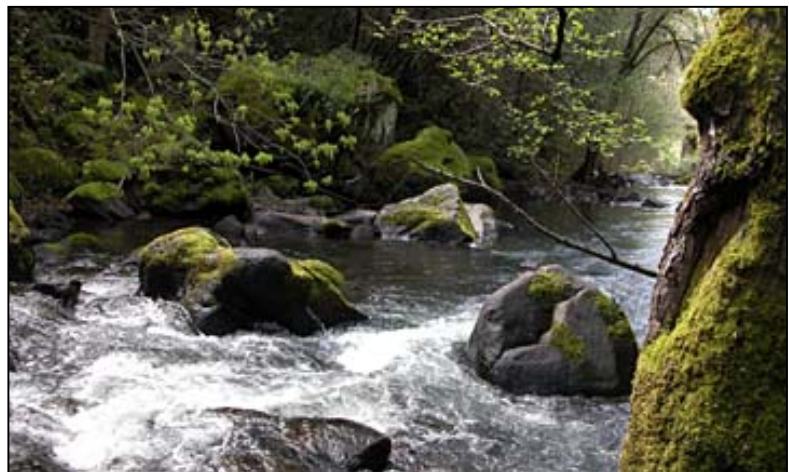
Additional Funding Obtained to Date: \$655,470

Background

Throughout the watershed, streams provide habitat for a variety of fish including steelhead and Chinook salmon. These species and others are facing tremendous pressures from increased sedimentation and a reduction in habitat. In the event of a fire, excessive fuel loads would not only destroy wildlife habitats but would also affect livestock grazing, farming operations, and local homeowners. The diversity of the watershed requires a coordinated, collaborative effort to ensure that issues are addressed on a comprehensive basis.

Benefits to the Watershed

- ◆ Kept local stakeholders informed of progress on the Battle Creek Steelhead and Salmon Restoration Project, as well as BCWC grant projects. The coordinator also provided local stakeholders with the opportunity to communicate concerns and issues regarding Battle Creek watershed.
- ◆ Worked with the Tehama/Shasta Watershed Coordinators Group to plan for a Watershed Awareness Day event on May 6, 2006. The event involved federal and state agencies as well as local watershed groups. The event provides the public with an opportunity to see what watershed groups are contributing to local watersheds, as well as to the greater Sacramento River watershed.
- ◆ Served as liaison between the local conservancy and fire safe council and the county fire safe council. This allows the coordinator to provide conservancy and fire safe council members with information about fire safe projects.
- ◆ Continued managing the Defensible Fuel Zone project. The project establishes a defensible space in which firefighters can make an effective stand against an approaching wildfire, protecting private property, wildlife and fish habitat from the threat of catastrophic fire.
- ◆ Worked with the UC Cooperative Extension to organize and facilitate a Forest Stewardship Workshop.



North Fork Battle Creek in winter

- ◆ Coordinated the design and implementation of a Stream Condition and Water Quality Monitoring Program. The coordinator worked with a subcontractor, Terraqua, to complete a stream plan outline and form a technical advisory committee.
- ◆ Managed funds for a road-decommissioning project in the Upper Battle Creek Watershed portion of Lassen Nation Park. The project will remove significant sediment sources in the upper watershed.
- ◆ Continually updated the BCWC website with educational and informational postings related to Battle Creek watershed activities, as well as activities of other watershed groups and the Battle Creek Steelhead and Salmon Restoration Project. The website provides stakeholders with an up to date resource for watershed information.
- ◆ Helped coordinate a “Manton Chipper Days” event with Sierra Pacific Industries, Western Shasta RCD and Shasta Fire Safe Council. The event allowed residents use a chipper to dispose of cut vegetation at the Manton Volunteer Fire Station. The event helped the community reduce potential fuel for fires in the area.
- ◆ Wrote a grant proposal for continued maintenance of a shaded fuel break/Defensible Fuel Profile Zone in the watershed and was awarded funds from the Tehama Resource Advisory Committee.
- ◆ Produced and distributed an issue of BCWC News to almost 350 people and posted it on website. The newsletter provided stakeholders with valuable watershed information.
- ◆ Held Battle Creek Watershed Conservancy Annual Meeting to allow stakeholders the opportunity to provide input about watershed issues.

Benefits to CALFED Program

Watershed Management – The coordinator supported several of the CALFED Watershed Program goals. Specifically, the coordinator:

- Worked with the Battle Creek Watershed Working Group outreach subcommittee to design an informational brochure that will be part of a series of brochures that will provide information about the Battle Creek Restoration Project.
- Helped to build stakeholder knowledge of the watershed by keeping the BCWC website up to date with links to current information about the Battle Creek Restoration Project.
- Worked with members of Greater Battle Creek Watershed Working Group to establish and prioritize issues regarding the Battle Creek Restoration Project.
- Organized and facilitated a community Fire Safe Council. The primary goal of the council is to reduce the risk of a catastrophic fire, which would damage or destroy Battle Creek Salmon and Steelhead Restoration Project efforts.
- Helped to organize a community “Chipper Days” event, which served both as an educational opportunity and an opportunity for community members to dispose of cut brush, a potential fire hazard.
- Served as a liaison between community members, PG&E, and federal and state agencies. For example, the coordinator worked with landowners to allow the Bureau of Reclamation to have access to private property for watershed improvement efforts.

Ecosystem Restoration – The coordinator worked on a Fire Safe Plan through both the Tehama County Fire Safe Council and the Battle Creek/Manton Fire Safe Council. One of the main goals of the fire plan and fuel breaks is to provide protection to Battle Creek habitat where salmon restoration is planned.

Performance Measure Progress

Goal: To improve watershed conditions and water quality in the Battle Creek watershed to support fisheries restoration.

Objective # 1: To manage and coordinate implementation of multiple grant sources that will undertake treatments of sediment sources in upper Battle Creek; develop a long-term monitoring program of stream conditions; maintain a Defensible Fuel Profile Zone in the watershed; and provide technical scientific support for Battle Creek Conservancy Board members and constituents.

Performance Measure: Production of videos, websites, and publications that disseminate technical information, reports and plans describing sediment reduction and water monitoring programs; reports on Defensible Fuel Profile Zone; records of meetings held to provide technical support to BCWC board and constituents.

Progress:

- Posted a report detailing the ongoing maintenance of Defensible Fuel Profile Zone on the BCWC website.
- The road decommissioning project is underway in the upper watershed portion of Lassen National Forest; site selections in process.
- A long-term Stream Condition and Water Quality Monitoring Program has been implemented; a Stream Plan Outline has been completed; and a Technical Advisory Committee has been formed.
- The Battle Creek-Manton Fire Safe Council has been formed. The purpose of the council is to identify and implement Defensible Fuel Zones as well as fire safe practices.
- BCWC website updated on a regular basis.
- Held a community meeting to provide information on fire recovery and resource agency resources.
- Produced and distributed a fact sheet on the Battle Creek Restoration Project.

Objective #2: To implement the Battle Creek Watershed Strategy.

Performance Measure: Meetings attended and notes posted to website; newsletters completed and distributed on schedule; website upgraded; information flyers produced and distributed.

Progress:

- Created and distributed an informational flyer on the Forest Stewardship Workshop.

- Posted notes and agendas of BCWC Board meetings on BCWC website on a regular basis.
- Posted notes and agendas of the Greater Battle Creek watershed Working Group meetings on BCWC website on a regular basis.
- Posted the notes and agendas of Battle Creek/ Manton Fire Safe Council meetings on BCWC website on a regular basis.
- Posted the notes and agendas of Tehama County Fire Safe Council meetings on BCWC website on a regular basis.
- Posted the notes and agendas of Watershed Coordinators Group meetings on BCWC website after each meeting.
- Posted notes from the Forest Stewardship Workshop on BCWC website.
- Upgraded and updated the BCWC website on a weekly basis.
- Produced and distributed a flyer that lists state and federal resource agencies, services and resources they have available, and contact information.
- Produced and distributed the BCWC newsletter. The newsletter provided stakeholders with educational information about the watershed.
- Produced and distributed a flyer to publicize the BCWC Annual Meeting.
- Produced and distributed an informational fact sheet about the watershed. The flyer was distributed at the BCWC annual meeting.

Butte County RCD

Mill-Big Chico / Upper Butte Lower Butte Watersheds



Amount Funded: \$218,338

Additional Funding Obtained to Date: \$187,367

Background

The upper portions of the watersheds are primarily forested lands highly susceptible to fires. Throughout the region, communities are growing rapidly exerting tremendous pressure on the environment. Both water quality and wildlife habitat is being severely degraded. There is tremendous concern about the Butte Basin Aquifer, which may not be recharging as rapidly as in the past. Water quality, invasive weeds, range management, and excessive fuel loads are only some of the issues that need to be addressed. Recognizing that significant challenges face the community, several organizations came together to form a partnership to address these critical issues.

Benefits to the Watershed

- ◆ The BCCWA coordinator partnered with Streaminders, a local chapter of the Izaak Walton League, to develop a project to address stream incision and streambank failure along 600 meters of Big Chico Creek. This reach of Big Chico Creek is identified as the creek's most degraded section, with a loss of connection to the floodplain and near vertical banks in many areas. The coordinator conducted outreach to residents, coordinated with County staff, and worked with Streaminders to develop the restoration concept and the grant proposal. The project will increase the stream's access to its floodplain, expand the wetland, restore native riparian and grassland species, establish an area of native plants for Mechoopda tribe cultural use, and provide interpretive panels for public education.
- ◆ Continued developing the Big Chico Creek Watershed Alliance Watershed Management Strategy. The strategy includes goals, objectives and actions for water quality, fisheries, wildlife, stream channel and riparian habitat, non-native species, groundwater, fire management and environmental education. The coordinator conducted research for the strategy, wrote the document, and is conducting outreach.



*Oak Woodlands Management
Workshop*

- ◆ Coordinated the Big Chico Creek citizen's water quality monitoring program on Big Chico Creek and began developing a new monitoring program for Little Chico Creek. Volunteer monitors are being recruited for this new effort.
- ◆ Collaborated with the UC Davis Ag Extension program to complete an Oak woodlands plan that was submitted to the Butte County Board of Supervisors for adoption.
- ◆ Worked with the Watershed Partnership, a cooperative partnership between five local watershed organizations, to organize events and strategize ways to develop funding resources for identified needs in the watersheds.
- ◆ Held a sustainable funding workshop to learn how to develop funding sources
- ◆ Began developing a series of workshops related to watershed health. Workshops will include Oak Woodlands Management for the large landowner and Equine Management Practices to promote water quality.
- ◆ Helped develop a Butte County RCD 2005 Stakeholder Survey Results report. This report provides a summary of Butte County landowner characteristics, interests, and needs related to natural resource issues and agricultural production, practices, and experiences. The report will be used to help increase awareness of local resource priorities.
- ◆ Began working with local watershed groups to produce a 2007 watershed calendar. The calendar is being designed to encourage and support the ongoing stewardship of creeks in Butte County. Each month will include a discussion of a different creek topic along with recommended actions to help residents protect and care for the county's diverse urban and rural creeks.
- ◆ Reestablished lines of communication between the Butte Creek Watershed Conservancy board of directors and partners. The coordinators efforts have lead to greater participation in the Conservancy board meetings and renewed annual memberships.
- ◆ Conducted two watershed tours for community members and partners. Tours included stops at a dump site, areas with potential flooding problems, and areas with road erosion problems.
- ◆ Conducted a public meeting to discuss gravel migration in Butte Creek. This issue is of great concern to the Conservancy and watershed community members.
- ◆ Met with Big Chico Creek landowners to discuss creek incising and threats to homes adjacent to the creek. The watershed alliance is developing a project that will use biotechnical streambank stabilization to protect the homes. The project will also restore the streams access to its floodplain.
- ◆ Coordinated a native vegetation flagging project as part of an invasive species removal project. Lower Chico Creek Watershed Group members flagged native vegetation in the stream channel so the Department of Water Resources crews could easily identify natives and concentrate on removing non-native species. Approximately 2 miles of stream channel was treated to remove *Arundo donax* and improve flood capacity.
- ◆ Conducted water quality training for 17 volunteers as part of the ongoing citizen-monitoring program.

Benefits to CALFED Program

Watershed Management: In support of the CALFED Watershed program goals, the coordinator worked with partners to develop a draft Watershed Management Strategy. The strategy proposes 16 joint actions between the BCCWA and the BCRC. Additional work completed that supported the goals of the Watershed program includes:

- A Draft Oak Woodlands Protection Plan was completed. The plan will provide a plan to help Butte County landowners protect oak woodlands, which will have benefits in addition to Oak Woodlands protection, including recharge area protection and protection of the winter range of the Tehama Deer Herd, the largest migratory deer herd in California.
- Conducted educational tours of the watershed.
- Provided stakeholders with a chance to discuss their watershed concerns and learn about the watershed.
- Worked with partners to plan a Watershed Calendar, which will be distributed to watershed stakeholders throughout the county. The calendar will provide information about local creeks and watersheds, as well provide tips for property owners and residents to care for the creeks.
- Continued meetings of the Cherokee Watershed Alliance with representatives from stakeholders throughout the watershed.

Ecosystem Restoration: The coordinator completed several tasks that will support the goals of the ecosystem restoration program. Specifically the coordinator:

Submitted a grant proposal to obtain funding for floodplain, riparian, wetland and grassland restoration at two sites in the Big Chico Creek watershed. The projects funded through this proposal would restore five habitat types identified in the Natural Community Conservation Plan Habitats of the Multi Species Conservation Strategy, including Valley Riverine Aquatic, Seasonal Wetland, Valley Foothill Riparian, Grassland and Anadromous Fish Species habitat. This grant would benefit all four runs of Chinook salmon (spring, fall, late fall and winter), steelhead, valley elderberry longhorn beetle and Swainson's Hawk.

Drinking Water Quality: The coordinator worked with partners to implement a citizen water quality-monitoring program on Big Chico Creek. Numerous residents have participated and have provided information that will be used to plan future projects.

Storage: The BCCWA Watershed Management Strategy includes actions to manage the recharge areas of a large regional aquifer (the Lower Tuscan) and to increase the scientific knowledge and public participation in the management of that aquifer.

Performance Measure Progress

Watershed Goal 1: To create a dynamic and integrated working relationship among all Butte County Watersheds and the newly created Butte County RCD.

Objective #1: To develop trust and mutual benefits between watershed groups and Butte County RCD, Memoranda of Understanding will be developed addressing goals, policies and procedures for program integration.

Performance Measurement: 4 MOU's between Big Chico Creek Watershed Alliance, Little Chico Creek Watershed Group, Butte Creek Watershed Conservancy and Cherokee Watershed Alliance and the Butte County RCD will be developed and signed.

Progress: MOUs have been developed and signed between BCCWA and Butte County RCD, and the LCCWG and Butte County RCD. Another MOU was adopted between the Cherokee Watershed Alliance and the BCRCD. This performance measure is 75% complete.

Objective #2: To share common understanding of watershed groups' history, decision-making process, progress to date, and future plans to facilitate on-the-ground conservation projects for voluntary landowners of Butte County.

Performance Measurement: Identify joint priorities and develop corresponding projects for implementation, one or more per calendar year.

Progress:

- BCCWA and LCCWG participated in the RCD strategic planning sessions and have identified three joint projects.
- The BCCWA draft Watershed Management Strategy proposes 16 actions with the BCRCD as lead or partner agency.
- The Cherokee Watershed Alliance completed a watershed group presentation on the Lower Tuscan Formation and conducted a tour of the watershed.
- The BCRCD held one annual meeting and conducted a survey of 230 landowners to receive input into local priorities.
- The BCRCD completed a 2005 Stakeholder Survey document and a 2005-2006 Annual Report.

Watershed Goal 2: To assist, educate and offer voluntary solutions to the agricultural landowners of Butte County regarding evolving requirements of Agricultural Discharge Waiver programs through partnerships collaboration and regional assistance.

Objective 1: Integrating the site-specific monitoring data of the tributary watershed programs and the agricultural discharge waiver program.

Performance Measurement: Increased efficiency and coordination of watershed meetings attended by growers.

Progress: The Watershed Coordinator contacted stakeholders to inform them about opportunities to increase irrigation efficiency.

Objective #2: To assist, coordinate and facilitate a Farm Water Quality Short Course. The curriculum to be developed by a collaboration of experts, including local commodity representatives, UC Cooperative Extension, NRCS, CSU Chico, Dept. of Agriculture and regional partners.

Performance Measurement: Annual increase of 25% of the acreage covered by a Farm Water Quality Plan from the previous year.

Progress: The coordinator assisted Hennigan Farms with a workshop where attendees learned about cover crops and filter strips. More than 25 people attended.

Watershed Goal 3: To maintain a self-sustaining Butte County RCD and partnership of watershed groups and to provide long term support for the watershed Coordinator positions so as to best serve the conservation needs of the lands of Butte County in an integrated forum.

Objective #1: To provide information and opportunities to interested parties of Butte County in order to make contact with representatives from private foundations and government agencies and develop personal relationships.

Performance Measurement: Butte County RCD in partnership with local watershed groups will host a “Meet the Grantmakers” workshop.

Progress: This workshop has been revised to focus on funding mechanisms that are alternatives to the boom and bust cycle of competitive grants. The workshop was scheduled for April 29, 2006.

Objective #2: To develop the knowledge and skills among Butte County RCD watershed coordinators to acquire resources sufficient to develop and expand watershed enhancement, outreach and education efforts.

Performance Measurement: At the end of three years Butte County RCD in collaboration with Watershed groups will have developed funding resources to sustain the proposed watershed coordinator positions and respond to priority projects within each watershed.

Progress: The grant-writing workshop has been completed. The Watershed Partnership meets monthly, with members providing funding updates.

Central Modoc RCD Upper Pit Watershed



Amount Funded: \$196,330

Additional Funding Obtained to Date: \$50,000

Background

The Pit River Watershed is a significant tributary to the Sacramento River. The main stem Pit River has been identified by the EPA as impaired due to nutrient loading, low dissolved oxygen, and high temperatures. Sediment is also a concern. A watershed-wide assessment is under way to collect data to support initiation of a comprehensive watershed plan.

Benefits to the Watershed

- ◆ Submitted seven grant proposals for stream restoration, wetland enhancement, and environmental education projects.
- ◆ Facilitated the establishment of over 23 water quality monitoring sites. Twelve (12) are directly related to agricultural uses and were established in coordination with landowners. Results from the monitoring efforts indicate an overall improvement in the Pit River water quality.
- ◆ Worked with the Pit River Watershed Alliance to produce a data gap analysis report.
- ◆ Analyzed data collected from ongoing monitoring efforts. The data indicated an overall improvement of Pit River water quality. The coordinator shared the data with the Pit River Watershed Alliance Coordinator.
- ◆ Finalized 3 project plans for Clark, Dry Creek Basin, and XL Ranches.
- ◆ Worked with Ducks Unlimited to propose a new project on Fitzhugh Creek.
- ◆ Adjusted design work on two previously designed restoration projects to better withstand flooding.
- ◆ Collaborated with RCD directors and staff to design recycling projects, biodiesel feasibility studies, aspen improvement projects, and good steward beef symposiums.
- ◆ Worked with the Modoc County Ag Commissioner, XL Ranch Tribal Staff, and BLM Botanist to develop a noxious weed control partnership.
- ◆ Worked with landowners to develop four new restoration projects and submitted grant proposals to fund the projects through the USFWS Partners for Wildlife Program, the Proposition 40 Consolidated Grants Program, and the NRCS Grazing Lands Conservation Initiative.
- ◆ Performed sensitive plant surveys at two project sites to ensure CEQA compliance, and trained labor crews to identify and avoid excess turbidity during in stream operations in order to comply with state water quality standards.
- ◆ Submitted CEQA Notice of Exemptions for three restoration projects.

- ◆ Wrote four newsletter articles for the Modoc Watershed Monitor about current and future restoration projects, agricultural discharge issues, and riparian fencing funding opportunities. The newsletter is distributed to watershed stakeholders.
- ◆ Contacted landowners to encourage them to participate in the countywide weed control program.
- ◆ Hosted two tours of proposed project sites for USFWS, Ducks Unlimited, and NRCS staff.
- ◆ Secured donations of culverts and cattle guards from the USFS for use in upcoming restoration projects.
- ◆ Helped a landowner develop an agreement with the NRCS to add \$77,000 in funding to the Dobe Swale Riparian Restoration Project.

Benefits to CALFED Program

Watershed Management – The coordinator completed several activities to increase the capacity of the local community to address watershed issues, improve coordination between agencies, local watershed groups, and other stakeholders, and educate the local community about the watershed. In support of CALFED Watershed Program goals the coordinator:

- Worked with landowners to identify restoration projects, submit grant proposals, and complete permit applications for currently funded restoration projects.
- Coordinated two field trips to four proposed restoration sites with landowners and resource specialists from USFWS, Ducks Unlimited, and NRCS to develop concepts and implementation strategies.
- Developed partnerships and sought funding for a local native plants nursery to serve restoration activities on USFS, BLM, CDF, and private lands.
- Developed partnerships and sought funding for a local biodiesel fueling station to ultimately reduce toxins in the air and water from diesel exhaust and spills.
- Assisted with developing an environmental educational curriculum, with an emphasis on watershed health, for grades K-12 to be taught through the River Center and the Modoc County Office of Education.
- Encouraged landowner participation in the county-wide weed control project and assisted with grant writing to fund this project through the Grazing Lands Conservation Initiative.

Ecosystem Restoration – The coordinator completed the following tasks that supported the goals of the Ecosystem Restoration Program:

- Facilitated the development of 23 new water quality monitoring sites.
- Composed two project narratives as a supplement to permit applications for restoration activities scheduled for 2006.
- Worked with landowners and agencies to develop new restoration project concepts and submitted grant proposals to obtain funding for the projects.
- Coordinated Technical Advisory Committee meetings to obtain additional technical expertise for upcoming restoration activities.

Storage – In support of Storage program goals, the coordinator submitted grant and permit applications to promote upcoming wetlands enhancement projects, which will slow run-off and naturally store water longer throughout the growing season.

Science – The coordinator supported Science program goals by completing the following tasks:

- Submitted grant applications to fund projects that will determine the effectiveness of agricultural water quality impairment best management practices.
- Collaborated with the UC Cooperative Extension and landowners to develop a program that assesses local hydrology and identifies the best locations to test management measures.

Performance Measure Progress

Watershed Goal 1: Continue contribution to watershed-wide assessment & planning.

Objective 1: Ensure success of Pit River Watershed Alliance Assessment Project.

Performance Measure: Documentation of district input to assessment drafts, participation in 9 team meetings, data-gap analysis.

Progress:

- The coordinator has attended more than 12 team meetings to date.
- The Upper Pit River Watershed Assessment was published October 2004. CMRCD Watershed Coordinators provided maps, photos, and other data for the Assessment, as well as editing services.

Objective 2: Support initiation of PRWA Watershed Management Planning Efforts.

Performance Measure: Documentation of participation in watershed plan process initiation; document planning comments.

Progress:

The coordinator has submitted grant proposals to find funding for developing a Watershed Strategy based on the findings of the Watershed Assessment. In March 06, PRWA submitted a full proposal to DWR for funding to develop a Watershed Strategy in the Upper Pit River.

Watershed Goal 2: Document Watershed Trends through Continued Implementation of CMRCD & PRWA Monitoring Plans.

Objective 1: Provide opportunities for landowner led monitoring of watershed conditions on private land.

Performance Measure: Initiate Farm and Ranch Watershed Monitoring at 12 sites.

Progress:

Thirteen (13) monitoring stations were established on private or tribal land with oversight provided by the landowners. Another 10 sites were located on public lands. Each month during the growing season these sites were sampled for pH, turbidity, temperature, specific conductance, dissolved oxygen, nutrients, etc. The results of the monitoring program from 2001-2005 are available through the PRWA.

This performance measure is complete.

Objective 2: Continue implementation of PRWA Water Quality Monitoring plan.

Performance Measure: Monitoring data collected under approved PRWA QAPP for 11 sites.

Progress:

- All 23 sites monitored by CMRCD staff within the District's boundaries were sampled each month during the growing season; the collected data was shared with PRWA staff.
- Data was checked thoroughly for errors before publishing in the Final Report.
- Sampling events were coordinated with landowners, PRWA, Pit RCD and Fall River RCD staff.

Watershed Goal 3: Improve Watershed Health through Restoration Projects.

Objective 1: Continue work with landowners to develop new watershed restoration projects.

Performance Measure: Approved project design alternatives for 9 new projects.

Progress:

- Six new restoration project designs were approved in 2005. In 2006, one new funded project design has been approved and another is pending approval.
- Four new restoration project concepts have been developed.
- The coordinator is currently developing environmental education programs for youth and adults. These programs will be directly related to current restoration projects and will include field trips to project sites.

Objective 2: Pursue programmatic Permitting and CEQA compliance for landowner implemented watershed restoration projects.

Performance Measure: Documentation of steps taken to coordinate programmatic permitting.

Progress:

Completed paperwork to obtain permits for three restoration projects and helped landowners complete permit applications.

Objective 3: Analyze effectiveness of past projects through continued observation of site conditions.

Performance Measure: Update reports on Bushey, Flournoy, Osborne, Parker Creek, Sears Flat, Thoms Creek, Gleason Creek, Heard/Valena Pit River, and Turner Creek Projects.

Progress:

- Many of these projects were damaged by flooding in May 2005. The Office of Emergency Services (OES) agreed to cost-share with CMRCD on repairs for 5 projects. CMRCD is waiting for the OES to provide funding for the repairs.
- Bushey, Flournoy, Sears Flat, and the Likely projects survived the May flood with minimal damage. These projects are often used as examples of successful restoration work.

Watershed Goal 4: Ensure coordination of local programs with watershed-wide, regional, and statewide stakeholders.

Objective 1: Continue management of UPRWEPP TAC to apply local expertise for local watershed problems.

Performance Measure: Minutes of 7 TAC meetings, 7 TAC newsletters, Maintenance of TAC section of CMRCD website.

Progress:

- Three TAC meetings have been held.
- The TAC section of the CMRCD website was regularly updated with accurate information.
- Three TAC newsletters have been produced and distributed. The newsletters follow TAC meetings to provide more information on important topics discussed.

Objective 2: Participate in regional and statewide forums to communicate local concerns to downstream stakeholders, and to bring downstream perspective to local watershed management efforts.

Performance Measure: Documentation of communication with coordination staff of PRWA, neighboring RCDs and watershed groups, and regional watershed management groups.

Progress:

- Conducted a demonstration of the CMRCD water-jet stinger for planting willows stems on a project managed by the Pit RCD just downstream from CMRCD's area.
- Attended the Regional Partnership Fair sponsored by the USFS to advocate for the establishment of a native seedbank program in the Upper Pit River.
- Attended multiple NECWA meetings to ensure landowner participation in the Irrigated Lands Program, and to tell state agencies about local landowner's efforts to comply with regulations.

Watershed Goal 5: Ensure that all stakeholders are aware of and informed about watershed concepts and issues.

Objective 1: Communicate watershed stewardship issues to diverse stakeholders through participation in or sponsorship of outreach events.

Performance Measure: Documentation of outreach participation and sponsorship in 13 outreach events.

Progress:

- Hosted the “Day in the District” which included a barbeque, field trip to restoration site, and a lesson on water quality monitoring. Over 50 people attended the event.
- Staffed a booth at the Migratory Bird Festival and County Fair to highlight the restoration efforts of the CMRCD and water quality monitoring program of the PRWA. The coordinator presented a “hands-on” display of macro invertebrates for all ages.
- Assisted with many other outreach/educational events such as the CMRCD sponsored “Good Steward Beef” Symposium, Citizens Monitoring Events, field trips with local students, meetings with teachers, Rotary Club, North Cal-Neva RC&D meetings, meetings with USFS, BLM, and multiple Conservation Organization resource specialists.
- Established summer internships for high school and college students to help implement watershed restoration projects.

Watershed Goal 6: Ensure continuation of CMRCD/UPRWEPP vision and goals.

Objective 1: Pursue funding through development of grant funds and in-kind sources.

Performance Measure: Documentation of 6 grant proposals submitted, documentation of collaboration on watershed wide proposals; documentation of in-kind sources solicited.

Progress:

- 10 grant proposals have been submitted to the following agencies/programs to fund CMRCD restoration projects: Office of Emergency Services, California Rivers Parkway Program (Prop 40), National Fish & Wildlife Foundation (NFWF) Bring Back the Natives Program, Consolidated Grant Program (Prop 40), US Fish & Wildlife Service, NFWF 5 Star Restoration Program, and the Modoc Resource Advisory Committee (Title 3), NRCS Wetlands Reserve Program.
- The CMRCD is collaborating with other local agencies to obtain funding through the NRCS Grazing Lands Conservation Initiative to support a county wide weed control program.
- Documentation landowner and local agency contributions to restoration projects is on file with the CMRCD & State Water Board. Recently the USFS offered used culverts and cattle guards to the CMRCD and BLM offered certified training to CMRCD staff to use weed control chemicals and equipment. Landowners have donated native plant materials, straw mulch, fencing materials, use of equipment and labor to complete restoration projects.

Objective 2: Initiate implementation of any new grant contracts during the life of this contract.

Performance Measure: Documentation of grant contract drafts and completed contracts as they become available; Documentation of project plans ready for handoff to project coordination staff, as they become available.

Progress:

- Two grant contract drafts were signed in 2005 by CMRCD staff with the Office of Emergency Services and the Wildlife Conservation Board.
- Another grant contract between Ducks Unlimited and CMRCD is currently being developed. Funding from the North American Wetlands Conservation Act was awarded to Ducks Unlimited to be used, in part, on three CMRCD projects.
- Contracts for three restoration projects between three landowners, NRCS and USFW&S programs are currently in the works.
- Pending approval of permit applications for two restoration projects, work may begin when weather and stream flow conditions allow.

Central Sierra RC&D Upper Mokelumne Watershed



Amount Funded: \$311,591

Additional Funding Obtained to Date: \$242,200

Background

The watershed's condition varies from pristine riparian habitats in some locations to other areas that have been significantly impacted by deforestation. Also, past practices such as gold mining have adversely affected the quality of water and continue to pose problems for wildlife and people. Residential communities are growing rapidly, exerting pressure on the environment. Recreational users, commercial entities, and agricultural operations add to the impact on the watershed. The diversity of interests requires a coordinated approach to ensure that resources remain available for future generations.

Benefits to the Watershed

- ◆ Assisted with the formation of the Amador/Calaveras Oak Conservation Group. The group is supported by the watershed coordinator and Central Sierra Resource Conservation and Development office. Participation with the group has resulted in increased overall support for watershed improvement efforts and the watershed council's efforts.
- ◆ Completed a Voluntary Oak Woodlands Management Plan for Calaveras County. The plan was forwarded to the Calaveras County Hardwoods Advisory Group for further revision.
- ◆ Worked with Amador County to educate local county public works staff and contractors about implementing erosion and sediment control projects and management techniques. The training included the introduction of Low Impact Development (LID) techniques.
- ◆ Continued to provide support for the local citizen-based voluntary water quality monitoring program within the Upper Mokelumne and Upper Calaveras River watersheds. The coordinator has recruited new citizen monitors and reported monitoring results to the state.
- ◆ Collaborated with partners to write and submit 7 grant proposals requesting approximately \$1.5 million. Writing the proposals included working with local community groups, private landowners, NGOs, and the El Dorado National Forest hydrology staff. This collaboration



Field training portion of streamwalk training as part of citizen volunteer water quality monitoring program on South Fork Mokelumne.

helped increase the visibility of the watershed council among the watershed's local resource management agencies.

- ◆ Secured a private donation of approximately \$1,200 to fund a water temperature monitoring study throughout the watershed. The data collected will be used in conjunction with existing water quality monitoring efforts to enhance understanding of low-flow hourly water temperatures and potential ecological impacts.
- ◆ Initiated a local youth education and school outreach program through the formation of the Stewardship Through Education group.
- ◆ Held two oak woodlands educational workshops focusing on oak woodland ecology and the recent state oak conservation law (Public Resource Code section 21083.4), and a workshop on local water agencies and their respective water management projects.
- ◆ Participated in the development of an Integrated Regional Water Management Planning (IRWMP) grant. The coordinator proposed four projects that would take place within the Upper Mokelumne River and Upper Calaveras River watersheds. Participation in this effort has helped build support and capacity for the watershed council's efforts.
- ◆ Provided two Streamwalk and bioassessment training sessions for volunteer water monitoring teams in Mokelumne and Dry Creek Watersheds. The training included evaluation of stream and riparian habitat features.
- ◆ Worked with local water agencies to identify water quality issues, data development needs, and complete water resource planning.
- ◆ Completed a water quality information assessment and data gap needs throughout the Upper Mokelumne River watershed to prepare for the Upper Mokelumne River Watershed Authority drinking water quality assessment and planning program.
- ◆ Worked with CALTRANS to complete an erosion and slope stabilization project at the Highway 26 bridge on the middle fork of the Mokelumne River.
- ◆ Held the first annual Upper Mokelumne River Watershed Awareness Festival.

Benefits to CALFED Program

Watershed Management – The coordinator completed several tasks that supported the Watershed Programs goals of increasing collaboration between agencies, local watershed groups, and other stakeholders; increasing the capacity of the community to address watershed issues; and sustaining local watershed activities. Activities completed include:

- Conducted a regional public outreach event focused on local and state oak woodland protection efforts. This event helped improve public awareness of the Upper Mokelumne River Watershed Council and watershed issues.
- Submitted two grant proposals totaling \$1,731,592 to support watershed improvement efforts.
- Helped develop a local oak conservation group, the Amador/Calaveras Oak Conservation group, for watershed stakeholders. The group is focused on education, support, and advocacy for local oak woodlands conservation and mitigation.
- Supported water quality monitoring and planning projects to build collaboration among local water management agencies.

- Provided technical assistance and oversight to the Calaveras County Planning Department and local community planning groups regarding the update of open space, watershed planning, wildlife corridors, and water resources components of the County General Plan.
- Worked with CALTRANS and local governments to improve collaboration on erosion and sediment control projects.
- Participated in preparing a regional IRWMP grant proposal to assist in watershed management goals and objectives to identify and prioritize future regional water management planning efforts within the watershed.
- Conducted a watershed tour for BLM Forest Fuels Program staff from the Washington DC office to support the local efforts of the fire safe councils.
- Completed a local public education and outreach program titled “Water Management in the Upper Mokelumne River Watershed – Players and Partners”. The outreach program helped increase the knowledge base of local water agency facilities, operations, and activities.

Ecosystem Restoration – In support of the CALFED Ecosystem Restoration program goals the coordinator:

- Worked with El Dorado National Forest staff to identify watershed restoration sites and develop plans within the Upper Mokelumne watershed. The coordinator prepared and submitted a grant proposal to obtain funding for identified activities.
- Worked with partners as part of a current CALFED funded Upper Mokelumne River Watershed Assessment and Watershed Planning grant to identify areas or projects for potential restoration.

Drinking Water Quality – The coordinator supported the goals of the Drinking Water Quality program by completing the following activities:

- Recruited and trained volunteer monitors to enhance the capacity of the local watershed Volunteer Water Quality Monitoring Program. Monitoring efforts were expanded to include adjacent watersheds.
- Worked to identify grant opportunities for water quality monitoring within the watershed.
- Worked collaboratively with the PG&E ERC FERC 137 project to identify water monitoring and biological resource needs and monitoring/reporting program implementation.
- Worked with local and state agencies and stakeholders on watershed planning activities designed to protect or restore water quality in the watershed. Planned activities include contractor training for water quality control, adding open space elements to County General Plan updates, and including watershed planning in community plans.
- Collaborated with partners to develop a local Low Impact Development (LID) workshop for local agencies and community planning groups.

Science – The coordinator supported the goals of the Science program by:
Developing tentative agreements with the PG&E FERC Project 137 Ecological Resource Committee to initiate research that will improve knowledge of water quality and ecological

resources within the watershed. Research efforts will focus on water temperature conditions and ecological considerations.

Performance Measures

Watershed Goal 1: Improve Water Quality in the Upper Mokelumne River Watershed.

Objective 1: Reduce non-point pollution entering surface waters within the watershed

Performance Measure: Identify non-point source contaminants; obtain partnerships; implement plan to reduce contaminants by 60%; and implement adaptive management protocol.

Progress:

- The coordinator investigated historic and current water quality monitoring data.
- Identified additional baseline monitoring needs for non-point source contaminants.
- Worked with regulatory agencies, stakeholders, partners, and water agencies to develop and fund new non-point source pollution water quality monitoring programs and equipment to provide an adaptive management component.
- Recruited and trained community volunteers for water quality monitoring and specialized training such as Proper Functioning and Condition (PFC) relating to watershed assessments. A Rapid Bioassessment Program was initiated last September and Streamwalk Training provided last October.
- Helped to identify non-point pollution sources.
- Evaluated water quality data to determine which (if any) water body segments are candidates for the USEPA 303(d) list.
- Worked with agencies and local nonprofit groups to identify, develop, and submit grants to fund the implementation of BMPs.
- Provided support to agriculture interests implementing water quality monitoring requirements of the SRWQCB Ag Waiver Program.

Objective 2: Reduce point source pollution entering surface waters within the watershed.

Performance Measurement: Identify point source contaminants; obtain partnerships; implement plan to reduce contaminants by 60%; and implement adaptive management protocol.

Progress:

- Investigated historic and current water quality data for permitted point source pollutants in the watershed.
- Identified additional baseline monitoring needs for point source contaminants.
- Worked with regulatory agencies, stakeholders, partners, or water agencies to fund water quality monitoring programs and equipment.
- Developed new partnerships, support, and cooperation to help fund, implement, and monitor water quality management plans.

Objective 3: Evaluate riparian habitat quality to enhance water quality in the watershed.

Performance Measurement: Identify nonpoint source contaminants (1.3.7); obtain partnerships (1.3.9); implement plan to reduce contaminants by 30% (1.3.11); and implement adaptive management protocol (1.3.5, 1.3.14)

Progress:

- Worked with Upper Mokelumne River Watershed Authority and Grant Contractor to develop protocols for watershed assessments and surveys.
- Work with stakeholders, landowners, local agencies, and nonprofits to identify, develop, and submit grants to fund the implementation of BMPs.

Objective 4: Reduce groundwater pollution impacts to human health within the watershed.

Performance Measures: Identify sources of well water contaminants (1.4.6); obtain partnerships (1.4.9); implement plan to reduce contaminants by 25% (1.4.10); and implement adaptive management protocol (1.4.4, 1.4.12).

Progress:

- Evaluated the extent and capacity of groundwater basins within the watershed. Geology of fractured rock throughout most of the Upper watershed areas results in lack of significant groundwater resources in all but lower portion of watershed.
- Participated in collaborative conjunctive water use planning efforts allows for evaluation and prevention of groundwater quality and quantity threats to the watershed.

Watershed Goal 2: Improve Public Awareness and Support for Watershed Management and Conservation in the Upper Mokelumne River Watershed.

Objective 1: Increase community education and outreach and participation for watershed activities.

Performance Measure: Ensure broad-based support for and membership in the Upper Mokelumne River Watershed Council and diversify stakeholder by securing participations from at least 75% of the dominant stakeholder groups. These include local businesses, recreational entities, tribes, utilities, ranchers, independent loggers, building contractors, federal agencies, water agencies, conservation groups, and others.

Progress:

- Worked with watershed participants to provide public outreach and encourage participation in watershed management activities.
- Developed new partnerships and support to help fund, implement, and maintain the Upper Mokelumne River Watershed Coordinator position. The coordinator identified new potential tasks and collaboration opportunities within the watershed for diverse watershed planning.

Watershed Goal 3: Improve cooperation and collaboration among watershed groups and related conservation activities within the Upper Mokelumne River Watershed.

Objective 1: Improve coordination, collaboration, and assistance among federal, state, and local governmental agencies, resource conservation and utilities districts, watershed councils, nonprofit groups, and other interest groups, insuring efficient use of CALFED grant funds and preventing duplication of activities.

Performance Measurement: Improve coordination, collaboration, information sharing, and support in the Upper Mokelumne River Watershed hydrologic unit area by documentation of increased watershed activities and partnerships over the life of the grant.

Progress:

- Prepared and submitted a grant proposal to initiate a facilitated Upper Mokelumne River Watershed participation workshop.
- Sponsored a watershed assistance and grant writing workshop to improve success of watershed grant proposals within and adjacent to the Upper Mokelumne River watershed.

Watershed Goal 4: Provide long-term funding for the position of watershed coordinator.

Objective 1: Develop an implementation plan and strategy that will address the long-term funding opportunities for a watershed coordinator position in the Upper Mokelumne River Watershed.

Performance Measurement: Develop a long-term funding program to secure the position of Watershed Coordinator for 5-10 additional years beyond the lifetime of the 2004 Watershed Coordinator Grant.

Progress:

Developed new partnerships, support, and cooperation to help fund and implement additional water quality, assessment, and restoration activities.

Watershed Goal 5: Increase economic development, watershed planning, and awareness of cultural resources in the Upper Mokelumne River Watershed.

Objective 1: Increase community training, technical education, and public education and outreach for watershed activities.

Performance Measurement: Increase participation by local skilled and trained citizens for specialized watershed assessment, restoration, and monitoring activities in the Upper Mokelumne River Watershed as evidenced the establishment of five monitoring teams.

Progress:

Recruited and trained new volunteer water quality monitors in the Upper Mokelumne, Upper Calaveras, and Dry Creek (Amador County) watersheds.

Chowchilla-Red Top RCD

Upper Chowchilla-Upper Fresno / Middle
San Joaquin-Lower Chowchilla Watersheds



Amount Funded: \$176,430

Additional Funding Obtained to Date: \$33,850

Background

Abundant wildlife, diverse topography, and cascading rivers epitomize these watersheds. Increased population densities, past practices, and an infusion of noxious weeds jeopardize their long-term health. Like many forested areas, fuel loads are growing at an alarming rate and rivers are being inundated by sedimentation. It is imperative that a coordinated, collaborative approach be taken to address these issues. The watershed coordinator will ensure that stakeholders from both watersheds work together to address the natural resource concerns of the local community.

Benefits to the Watershed

- ◆ Prepared and submitted a grant proposal to the Madera County Resource Advisory Committee (RAC) for \$3,000.00 to pay for the printing of the Sierra Smarts brochure.
- ◆ Submitted a \$600,000 concept proposal to the SWRCB to fund a survey and mapping project of Ash Slough, Berenda Creek, Berenda Slough, and Cottonwood Creek.
- ◆ Created watershed educational programs. The coordinator:
- ◆ Conducted an after school program for an elementary and intermediate school. Students learned about water conservation and water quality.
- ◆ Spoke to the Sierra/Oakhurst Kiwanis Club about the fractured rock system in the foothills, private wells and well testing, and how to spot noxious weeds. Forty people attended this presentation.
- ◆ Presented to the East Merced Resource Conservation Stakeholders group about watershed friendly *Arundo donax* removal.
- ◆ Meet with local property owners to discuss issues in the watershed and recruit members for the stakeholders committee. The coordinator also helped landowners identify *Arundo donax* and areas in need of treatment.



Participants in the Natural Resources Youth Workshop learn about water quality sampling.

- ◆ Worked with partners to create and distribute informational watershed brochures to 22,330 residents in the foothills.
- ◆ Worked with the Clean Water Team to create a brochure to distribute to kids' events. The brochure, titled "Gee Whiz Water Quiz: How Much Do You Know About Your Water?", helps increase watershed awareness in children.
- ◆ Collaborated with the Millerton/Finegold Watershed coordinator to discuss addressing watershed issues on a regional basis.
- ◆ Helped the North Fork Community Development Council write a grant proposal for restoration projects on Pitcher Creek and North Fork Mill River.
- ◆ Wrote numerous educational articles about invasive weeds that were published by local newspapers.
- ◆ Held two small water conferences to provide local residents with information about the Madera Irrigation District's Water Enhancement Plan/Water Bank. Almost 50 people attended the meetings. The meetings were followed up with newspaper articles to inform and educate the public.
- ◆ Organized and participated in the first annual Oakhurst River Parkway Creek Stewardship Day. Thirty-five participants helped remove noxious weeds and collected information during the event.
- ◆ Presented water conservation and noxious weed information to the Oakhurst Lions Club, the North Fork Lions Club, the Madera County Flood Control and Water Conservation Advisory Committee, and a variety of other groups.

Benefits to CALFED Program

Watershed Management – The coordinator completed many activities that supported the goals of the watershed management program. Activities included:

- Obtained funding for a Sierra Smarts brochure. The brochure is an educational piece that describes the "fractured rock" water system in the Sierra Foothills and how to live in this type of system through water conservation and proper well drilling
- Collaborated with the Department of Water Resources, the Regional Water Quality Board, Sierra Foothill Conservancy, and Central Sierra Watershed Committee to create the Sierra Smarts brochure.
- Conducted an educational after school program about water conservation for the North Fork School Elementary/Intermediate school.
- Provided a presentation on private wells and well testing for the Sierra/Oakhurst Kiwanis Club.
- Worked with the Clean Water Team to create the "How do you measure up?" quiz brochure for adults to test their water and water conservation knowledge and community involvement.
- Partnered with NRCS to present Natural Resources Youth Workshop at Scout Island in Fresno. The program involved speakers/experts in the various watershed sciences. Speakers educated the students on soils, water, invertebrates and more. A total of 65 people participated in this event.

Ecosystem Restoration – In support of the Ecosystem Restoration Program the coordinator collaborated with the Madera County Planning Department to implement a weed control program. The program will focus on “Log Cabin” kits and the noxious weeds that are frequently found within the kits. When the county approves the building plans for a log cabin a notification will go out to the County Agricultural Commissioner. The commissioner’s office will then schedule an inspection of the building and the building site one year later to look for any noxious weeds brought in during construction.

Performance Measures

Watershed Goal: Support and promote the integration among watershed efforts with the coordination of stakeholders working together through community involvement, providing public education regarding watershed issues.

Objective 1: Establish the Chowchilla And Fresno River Watershed Council to facilitate & improve coordination of stakeholders; provide collaboration and assistance among government agencies, local watershed groups and organizations.



Community/Town Hall meeting held in Oakhurst

Performance Measurement: Stakeholder Cooperation Agreements are signed by at least 75% on the Watershed Council; Develop watershed council work plans.

Progress:

Five Memorandums of Understanding have been signed that demonstrate the willingness of groups to work together. The MOUs are between the Chowchilla Red Top RCD and Coarsegold RCD, East Merced RCD, Eastern Madera County Fire Safe Council, Central Sierra Watershed Committee, and the Sierra/San Joaquin Weed Management Alliance.

Watershed Goal: Support and promote grants and program applications that achieve our goal for sustainable watershed health and the continuance of Watershed Council/Coordinator.

Objective #2: Implement a strategy that will ensure long-term sustainability of local watershed activities supporting ecosystem restoration; water quality; water use efficiency and watershed management while integrating the Watershed Program and other CALFED program elements.

Performance Measurement: Identify and apply for grants to improve watershed elements as defined in work plan and for continuation of Watershed Council/Coordinator.

Progress:

The coordinator helped four separate organizations write \$2.6 billion in grant proposals for projects in the watershed. Additionally, the coordinator wrote and submitted five grant proposals for watershed improvement projects. The RCD received \$40,000 as a result of these proposals.

Watershed Goal: Provide expertise, advice, educational information and present opportunities to landowners, government agencies and the general public.

Objective # 3: To support education and stakeholder outreach. Improve water management by working with local communities at a watershed level. Emphasize local participation & government cooperation at all levels.

Performance Measurement: Newspaper articles; Presentations to Local Boards, Organizations, Water Districts, and Community Events; Host Demonstration Workshops; Coordination of Volunteers Efforts for Education opportunities.

Progress:

- Submitted four articles to the six area newspapers on noxious weeds and other water issues.
- Gave two presentations to Local Boards including the Flood Control and Water Conservation Advisory Board and the East Merced Resource Conservation District Board.
- Gave six presentations about the watershed to community organizations including the Oakhurst Lions Club, North Fork Lions Club, Chowchilla Rotary Club, Oakhurst Women's Green Thumb Gardening Club, Sierra/Oakhurst Kiwanis Club, and North Fork Elementary School after school program.
- Gave one presentation to a water district about *Arundo donax* in Chowchilla.
- Provided four presentations at community events including the Rivergold Elementary School Earth Day event, the Oakhurst River Parkway Creek Stewardship Day, the Natural Resources Youth Workshop, and Sharing Knowledge: Tribal and RCD meeting.
- Organized and hosted four community workshops including: Foothill Visioning Workshop, Valley Stakeholders Workshop, Madera Irrigation Water Enhancement Project, and the Oakhurst Basin Water Study.
- Coordinated three volunteer events for educational purposes this year including: the Oakhurst River Parkway Creek Stewardship Day, the Natural Resources Youth Workshop, and the Senior Scholarship/Award Program.